

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A route monitor control system comprising:

a plurality of OAM cell handlers (OCHs);

a plurality of virtual path handlers (VPHs);

a plurality of virtual channel handlers (VCHs);

a plurality of trunks; and

a control unit configured to:

issue an OAM (operation and maintenance) cell send instruction to a first one of said plurality of OAM cell handlers,

control said ~~specific~~ first OAM cell handler to carry out a loop back control test to at least one of said virtual path handlers, at least one of said virtual channel handlers, and at least one of said trunks, which are associated with said first OAM cell handler in response to said OAM cell send instruction, and

when said first OAM cell handler sends out an OAM cell in response to said OAM cell send instruction, determine a fault position based on returning or non-returning of the OAM cell to said first OAM cell handler.

2. (previously presented) The route monitor control system according to claim 1, wherein said control unit is further configured to:

carry out a switching operation of a route from at least one of said virtual path handlers to at least one of said trunks for fault avoidance based on the determined fault position.

3. (currently amended) The route monitor control system according to claim 1, wherein said plurality of OAM cell handlers, said plurality of virtual path handlers, said plurality of virtual channel handlers, said plurality of trunks, and said control unit are contained in an ATM (asynchronous transfer mode) switching apparatus.

4. (previously presented) The route monitor control system according to claim 1, wherein said control unit is further configured to:

periodically issue said OAM cell send instruction to said first OAM cell handler.

5. (previously presented) The route monitor control system according to claim 1, wherein said control unit is configured to:

determine the fault position based on returning or non-returning of each of the OAM cells to said first OAM cell handler.

6. (previously presented) The route monitor control system according to claim 1, wherein said control unit is configured to:

carry out the issuing operation, the loop back control test and the determining operation while changing said first OAM cell handler among said plurality of OAM cell

handlers.

7. (previously presented) A route monitor control method comprising:
 - issuing an OAM (operation and maintenance) cell send instruction to a specific one of a plurality of OAM cell handlers;
 - carrying out a loop back control test to at least one of a plurality of path handlers, at least one of a plurality of channel handlers, and a trunk, which are associated with said specific OAM cell handler, in response to said OAM cell send instruction;
 - sending out an OAM cell from said specific OAM cell handler in response to said OAM cell send instruction; and
 - determining a fault position based on returning or non-returning of the OAM cell to said specific OAM cell handler.

8. (previously presented) The route monitor control method according to claim 7, further comprising:
 - carrying out a route switching operation for fault avoidance based on the determined fault position.

9. (previously presented) The route monitor control method according to claim 7, wherein said carrying out a loop back control test is performed in an ATM (asynchronous transfer mode) switching apparatus.

10. (previously presented) The route monitor control method according to claim 7, wherein said path handlers, said channel handlers, said trunk, and said specific OAM cell handler are contained in an ATM (asynchronous transfer mode) switching apparatus.

11. (previously presented) The route monitor control method according to claim 7, wherein said issuing comprises:

periodically issuing said OAM cell send instruction to said specific OAM cell handler.

12. (previously presented) The route monitor control method according to claim 7, wherein said carrying out comprises:

carrying out said loop back control test to all of said path handlers, said channel handlers, and said trunk in response to said OAM cell send instruction, and

said sending out comprises:

sending out OAM cells from said specific OAM cell handler in response to said OAM cell send instruction.

13. (previously presented) A system, comprising:

a plurality of testing devices;

a plurality of path handlers;

a plurality of channel handlers;

a plurality of trunks; and

a control unit configured to:

issue an instruction to a first one of the plurality of testing devices, the instruction indicating that the first testing device is to perform a loopback control test, wherein the first testing device is configured to:

receive the instruction,

send test data to at least one of the path handlers, channel handlers or trunks in response to the instruction,

receive back at least some of the test data, and

forward results of the loopback control test to the control unit,

wherein the control unit is further configured to:

identify a fault based on the forwarded results.

14. (previously presented) The system of claim 13, wherein the control unit is configured to periodically issue the instruction to the first testing device.

15. (previously presented) The system of claim 13, wherein when forwarding results, the first testing device is configured to:

forward information to the control unit based on return of the test data to the first testing device.

16. (previously presented) The system of claim 15, wherein when identifying a fault, the control unit is configured to identify the fault based on the forwarded information.

17. (previously presented) The system of claim 13, wherein the control unit is further configured to:

perform a fault avoidance operation based on the identified fault.

18. (previously presented) The route monitor control system of claim 13, wherein the control unit is configured to forward loopback control test initiation instructions to the plurality of the testing devices.

19. (previously presented) The system of claim 13, wherein the plurality of testing devices may be included in the plurality of path handlers, the plurality of channel handlers or the plurality of trunks.

20. (new) The system of claim 13, wherein the plurality of path handlers, the plurality of channel handlers and the plurality of trunks are contained in a single switching apparatus.